

Recovery Plan Action Status

Plan Name: Draft Recovery Plan for the Coastal-Puget Sound Distinct Population Segment of Bull Trout

Plan Status: Draft

Plan Date: 01-Jul-04

Lead Agency: USFWS

Lead Office: Washington Fish And Wildlife Office

(360)

753-9440)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	1	A1.1.1	Identify and improve or remove unstable or problem roads causing fine sediment delivery	Unknown			County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Private landowners	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	2	A1.1.10	Reduce anthropogenic sediment and contaminant sources generated from residential development and urbanization	Unknown			City governments, County governments, Washington Department of Ecology, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.1.11	Maintain and improve instream flows	Unknown			City governments, County governments, Washington Department of Ecology, U.S. Federal Energy Regulatory Commission, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.1.2	Improve routine road maintenance practices affecting water quality	Unknown			City governments, County governments, Washington Department of Transportation, U.S. Federal Highway Administration	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A1.1.3	Implement measures to restore natural thermal regime	Unknown			Washington Department of Ecology, U.S. Federal Energy Regulatory Commission, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	3	A1.1.4	Reduce anthropogenic nutrient input	Unknown			County governments, Washington Department of Natural Resources, Washington Department of Ecology, U.S. Geological Survey, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.1.5	Encourage the uptake of marine derived nutrients from salmon carcasses into the freshwater ecosystem	Unknown			County governments, Tribal governments, Washington Department of Fish and Wildlife, Shared Strategy for Puget Sound Watershed Groups, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Cost embedded in habitat actions and action 3.1.3
Bull Trout (Salvelinus confluentus)	2	A1.1.6	Monitor water quality and meet water quality standards for temperature, nutrient loading, dissolved oxygen, and contaminants	Unknown			County governments, Tribal governments, Washington Department of Ecology, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A1.1.7	Identify, restore, and protect groundwater and hyporheic sources	Unknown			Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Ecology, U.S. Federal Energy Regulatory Commission, U.S. Geological Survey, Non-governmental organizations, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.1.8	Reduce anthropogenic sediment and contaminant sources generated from agriculture practices	Unknown			County governments, Washington Department of Ecology, U.S. Geological Survey, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.1.9	Reduce anthropogenic sediment sources generated from forest management	Unknown			County governments, Washington Department of Natural Resources, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	3	A1.2.1	Eliminate or minimize entrainment at diversions and ditches	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, U.S. Federal Energy Regulatory Commission, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs shared with salmon recovery

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Bull Trout (Salvelinus confluentus)	2	A1.2.2	Provide adequate fish passage around diversions and dams	Unknown			Washington Department of Fish and Wildlife, City of Bellingham, Washington, Puget Sound Energy, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	Costs shared with salmon recovery
Bull Trout (Salvelinus confluentus)	2	A1.2.3	Identify and eliminate culvert barriers	Unknown			City governments, County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Transportation, Salmon Recovery Funding Board, U.S. Federal Highway Administration, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost depends on number of culverts identified and type of action necessary
Bull Trout (Salvelinus confluentus)	3	A1.2.4	Identify and eliminate or modify tide gates, pump stations, and flood gates blocking access to bull trout habitat	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Transportation, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A1.2.5	Inform the public about the impacts of recreational barriers to migrating bull trout	Unknown			Washington Department of Fish and Wildlife, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Development and distribution of educational information

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Bull Trout (Salvelinus confluentus)	2	A1.3.1	Protect and restore riparian areas	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	3	A1.3.10	Enhance and restore instream habitat	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, Non-governmental organizations, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.3.11	Protect riparian and stream channel habitat at managed campgrounds, trail systems, and recreational sites	Unknown			County governments, Washington Department of Natural Resources, National Park Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A1.3.2	Identify, evaluate, and restore overwintering habitat in mainstem rivers and tributaries	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions for salmon
Bull Trout (Salvelinus confluentus)	2	A1.3.3	Identify and restore foraging waters with high restoration benefit	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions for salmon

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Bull Trout (Salvelinus confluentus)	2	A1.3.4	Reduce stream channel degradation and increase channel complexity	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.3.5	Practice non-intrusive flood control and flood repair activities	Unknown			City governments, County governments, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.3.6	Reduce development impacts on streams, floodplains, and lake shores	Unknown			City governments, County governments, Shared Strategy for Puget Sound Watershed Groups, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A1.3.7	Reduce transportation corridor impacts on streams	Unknown			City governments, County governments, Washington Department of Natural Resources, Burlington Northern and Santa Fe Railway, Washington Department of Transportation, U.S. Federal Highway Administration, U.S. Forest Service, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	3	A1.3.8	Improve grazing practices	Unknown			County governments, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.3.9	Restore natural stream channel morphology	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, U.S. Federal Energy Regulatory Commission, U.S. Forest Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.4.1	Reduce reservoir operation impacts	Unknown			Seattle City Light, Puget Sound Energy, Seattle Public Utilities, U.S. Federal Energy Regulatory Commission, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.4.2	Provide sufficient instream flow downstream from dams and diversions	Unknown			Seattle City Light, City of Bellingham, Washington, Puget Sound Energy, U.S. Federal Energy Regulatory Commission, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A1.5.1	Update and/or review local Forest Service or other watershed analyses	Unknown			Washington Department of Natural Resources, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A1.5.2	Upgrade or decommission existing and potential problem roads	Unknown			County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	2	A1.5.3	Minimize levels of effective impervious surface from development	Unknown			City governments, County governments, Washington Department of Ecology, Washington Department of Transportation, U.S. Federal Highway Administration	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A1.6.1	Identify and remediate contaminant sites in estuarine and nearshore marine areas	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Ecology, Ports [Puget Sound area], U.S. Environmental Protection Agency, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A1.6.2	Reduce impacts of development and transportation corridors along estuarine and marine shorelines	Unknown			City governments, County governments, Tribal governments, Burlington Northern and Santa Fe Railway, Washington Department of Transportation, Ports [Puget Sound area], U.S. Federal Highway Administration, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A1.6.3	Restore or recreate intertidal foraging habitats in key areas	Unknown			City governments, County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Transportation, Salmon Recovery Funding Board, U.S. Federal Highway Administration, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A2.1.1	Review and analyze effectiveness of current fish stocking policies	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	3	A2.2.1	Review existing enforcement of current policies for preventing illegal transport and introduction of nonnative fishes	Unknown			Tribal governments, Washington Department of Fish and Wildlife	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A2.3.1	Discourage unauthorized fish introductions	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Likely requires additional funding
Bull Trout (Salvelinus confluentus)	2	A2.4.1	Review existing protocols for eradicating, suppressing, or managing nonnative fish populations and implement protocols where needed	Unknown			Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A2.5.1	Determine distribution and abundance of nonnative fish (brook trout and westslope cutthroat trout) and identify overlap with bull trout	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A2.5.2	Evaluate brook trout impacts to migratory bull trout populations	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A2.5.3	Experimentally remove established brook trout populations from priority streams	Unknown			Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A2.6.1	Remove invasive nonnative plants limiting the effectiveness of riparian areas and restore with native vegetation	Unknown			County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Non-governmental organizations, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A2.6.2	Continue control of spartina in estuarine and nearshore areas	Unknown			County governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A3.1.1	Integrate research and monitoring results into native fish management plans and related information resources	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.1.2	Protect remaining bull trout strongholds and native species complexes	Unknown			Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Seattle Public Utilities, National Park Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	A3.1.3	Provide increased forage opportunities in freshwater.	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. National Marine Fisheries Service (NOAA Fisheries)	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.1.4	Increase biomass of marine forage base	Unknown			County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Transportation, Ports [Puget Sound area], U.S. National Marine Fisheries Service (NOAA Fisheries)	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.2.1	Evaluate the impacts of harvest on bull trout populations	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.2.2	Evaluate and minimize incidental mortality of bull trout in other fisheries	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Northwest Indian Fisheries Commission, U.S. National Marine Fisheries Service (NOAA Fisheries), National Park Service, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	1	A3.2.3	Increase enforcement efforts with special emphasis on bull trout spawning and pre-spawning staging areas to eliminate illegal harvest	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	3	A3.2.4	Expand angler and public education efforts	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.2.5	Coordinate with British Columbia on harvest management strategies	Unknown			Washington Department of Fish and Wildlife, British Columbia Ministry of Water, Land, and Air Protection, National Park Service, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.3.1	Monitor effects of planted hatchery fish on bull trout, especially effects related to increased competition, disease, and predation	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A3.4.1	Continue to monitor and evaluate the effects of the current minimum size limit on existing recreational bull trout fisheries	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Associated with other population monitoring actions
Bull Trout (Salvelinus confluentus)	2	A3.4.2	Identify important bull trout spawning and staging areas that may require special regulations	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost will depend on 5.2.1

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Bull Trout (Salvelinus confluentus)	3	A4.1.1	Conduct a genetic inventory	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Study plan currently being developed by USFS
Bull Trout (Salvelinus confluentus)	2	A4.1.2	Determine level of interaction between bull trout and Dolly Varden populations	Unknown			Washington Department of Fish and Wildlife, British Columbia Ministry of Water, Land, and Air Protection, Seattle City Light, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A4.2.1	Evaluate level of gene flow among core areas	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	Some costs embedded within other research and monitoring actions
Bull Trout (Salvelinus confluentus)	2	A5.1.1	Design and implement a population monitoring strategy for the Puget Sound Management Unit	Unknown			Tribal governments, Washington Department of Fish and Wildlife, British Columbia Ministry of Water, Land, and Air Protection, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	3	A5.1.2	Evaluate existing recovery measures over time	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Shared Strategy for Puget Sound Watershed Groups, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.2.1	Determine complete distribution of anadromous, fluvial, and resident bull trout and habitats used by each life stage	Unknown			Tribal governments, Washington Department of Fish and Wildlife, British Columbia Ministry of Water, Land, and Air Protection, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.2.2	Determine migratory pathways and patterns, and habitat preferences of anadromous bull trout in the Puget Sound Management Unit	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Army Corps of Engineers, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	A study is currently being conducted in north Puget Sound by ACOE
Bull Trout (Salvelinus confluentus)	3	A5.2.3	Conduct migrational studies for the Puget Sound Management Unit and coordinate with the Olympic Peninsula Management Unit and British Columbia	Unknown			Washington Department of Fish and Wildlife, British Columbia Ministry of Water, Land, and Air Protection, Seattle City Light, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey	Work type not yet selected	Labor type not yet selected	Ongoing study occurring in the Upper Skagit core area by SCL and BCM

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Bull Trout (Salvelinus confluentus)	3	A5.2.4	Identify and assess complete estuarine and marine forage base for bull trout	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.2.5	Determine extent of effects from contaminant exposure	Unknown			Washington Department of Ecology, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.2.6	Evaluate importance of streams with only incidental bull trout presence	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.2.7	Identify key habitat features within freshwater and marine habitats	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.2.8	Monitor additional local populations to provide more accurate abundance estimates for each core area	Unknown			Tribal governments, Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Assumes two index areas per core area, cost does not include existing index areas

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Bull Trout (Salvelinus confluentus)	3	A5.2.9	Determine actions necessary to restore spawning and rearing in potential local populations	Unknown			Washington Department of Fish and Wildlife, Seattle Public Utilities, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.3.1	Develop a sediment monitoring program	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.3.2	Develop a temperature monitoring program	Unknown			Washington Department of Fish and Wildlife, Washington Department of Ecology, National Park Service, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.3.3	Evaluate and improve existing forestry best management practices	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.3.4	Evaluate and improve existing agricultural conservation practices	Unknown			County governments, Washington Department of Fish and Wildlife, Washington Department of Ecology, Non-governmental organizations, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	3	A5.3.5	Evaluate and improve existing and proposed development best management practices	Unknown			City governments, County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Ecology	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A5.5.1	Develop a predictive model of suitable habitat used by juvenile and resident bull trout	Unknown			U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs shared with Olympic Peninsula Management Unit
Bull Trout (Salvelinus confluentus)	3	A5.5.2	Investigate potential use of the upper Green River by bull trout, and investigate habitat suitability	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Army Corps of Engineers, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.5.3	Investigate potential use of the upper Nisqually River by bull trout	Unknown			Washington Department of Fish and Wildlife, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A5.6.1	Determine the life history requirements and interactions of overlapping resident and migratory bull trout populations	Unknown			Tribal governments, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	3	A6.1.1	Coordinate bull trout recovery with other listed salmonid species recovery efforts	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Shared Strategy for Puget Sound Watershed Groups, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	1	A6.1.2	Ensure protection of the highest quality spawning and rearing habitats remaining within each core area through measures including conservation land purchases and easements	Unknown			County governments, Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Salmon Recovery Funding Board, Shared Strategy for Puget Sound Watershed Groups, U.S. Fish and Wildlife Service, U.S. Forest Service, Non-governmental organizations	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A6.2.1	Ensure adequate protection for bull trout at all life stages under Washington State Water Quality Standards	Unknown			Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	A6.3.1	Ensure restrictions on recreational mineral prospecting and placer mining in bull trout habitat are effective	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	3	A7.1.1	Generate progress reports on implementation of the bull trout recovery plan	Unknown			Tribal governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Shared Strategy for Puget Sound Watershed Groups, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	A7.3.1	Periodically assess progress toward recovery goals and assess recovery action priorities	Unknown			Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Ecology, U.S. Fish and Wildlife Service, U.S. Forest Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.1.1	Identify and improve unstable or remove problem roads	Unknown			County governments, Washington Department of Natural Resources, Washington Department of Transportation, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Complete ongoing surveys and inventories. Costs will be partially covered by ongoing actions

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Bull Trout (Salvelinus confluentus)	2	B1.1.2	Improve routine road maintenance practices	Unknown			County governments, Washington Department of Natural Resources, Washington Department of Transportation, Quinalt Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.1.3	Implement measures to restore natural thermal regime	Unknown			U.S. Federal Energy Regulatory Commission, U.S. Forest Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	3	B1.1.4	Assess and reduce water quality impacts from nutrient input from human activities	Unknown			Washington Department of Ecology, U.S. Environmental Protection Agency, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B1.1.5	Encourage the reestablishment of marine-derived nutrients	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs partially covered by other action 1.2.4
Bull Trout (Salvelinus confluentus)	2	B1.1.6	Monitor water quality and meet water quality standards for temperature, nutrient loading, etc.	Unknown			Washington Department of Ecology, U.S. Environmental Protection Agency, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.1.7	Identify, restore, and protect groundwater and hyporheic sources	Unknown			Washington Department of Natural Resources, U.S. Forest Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B1.1.8	Eliminate fine sediment sources from historical roads and railroads	Unknown			Quinault Indian Nation, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	2	B1.1.9	Adopt and implement a stormwater strategy for the Dungeness watershed, the lower Elwha watershed, and Hood Canal	Unknown			County governments, Washington Department of Ecology	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.2.1	Eliminate entrainment in diversions and ditches	Unknown			U.S. Fish and Wildlife Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.2.2	Identify diversions that block fish passage and provide passage where feasible	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, Dungeness River Agricultural Water Users Association, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Costs partially covered by other actions (1.2.4, 1.2.5)
Bull Trout (Salvelinus confluentus)	2	B1.2.3	Eliminate culvert barriers	Unknown			County governments, Washington Department of Natural Resources, Washington Department of Transportation, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost depends on number of culverts identified
Bull Trout (Salvelinus confluentus)	3	B1.2.4	Eliminate or modify tidegate on the Skokomish River	Unknown			U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B1.2.5	Restore bull trout passage over dams and other related fish passage barriers	Unknown			Washington Department of Fish and Wildlife, Tacoma Power, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	Cost will mostly be covered in salmon passage restoration projects. Total cost for Cushman Project upstream passage is estimated at 3 million. No estimate for downstream passage. Elwha Dam removal costs include complete ecosystem restoration and city water supply
Bull Trout (Salvelinus confluentus)	2	B1.2.6	Improve instream flows	Unknown			Washington Department of Ecology, Dungeness River Agricultural Water Users Association, Tacoma Power, U.S. Federal Energy Regulatory Commission	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.2.7	Improve the efficiency of the Dungeness watershed irrigation network	Unknown			U.S. Fish and Wildlife Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.1	Restore and protect riparian areas	Unknown			Washington Department of Natural Resources, Washington Department of Transportation, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B1.3.10	Restore instream habitat	Unknown			Simpson Timber Company, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Quinalt Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by other actions
Bull Trout (Salvelinus confluentus)	3	B1.3.11	Protect riparian and channel habitat at campgrounds, trail systems, and recreation sites	Unknown			Washington Department of Natural Resources, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.12	Restore natural sediment routing and fluvial processes	Unknown			County governments, Washington Department of Fish and Wildlife, Washington Department of Transportation, U.S. Federal Energy Regulatory Commission, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.13	Reduce impacts associated with recreational use of the rivers	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B1.3.14	Reduce riparian firewood harvest	Unknown			Washington Department of Natural Resources, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.2	Identify, evaluate, and restore overwintering habitat in mainstem rivers and tributaries	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost depends on restoration needs

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Bull Trout (Salvelinus confluentus)	2	B1.3.3	Identify, evaluate, and restore important bull trout freshwater foraging waters.	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost partially depends on action 5.2.1
Bull Trout (Salvelinus confluentus)	2	B1.3.4	Reduce stream channel degradation and aggradation	Unknown			Simpson Timber Company, Washington Department of Natural Resources, Dungeness River Agricultural Water Users Association, U.S. Federal Energy Regulatory Commission, Olympic National Park, U.S. Forest Service, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.5	Practice nonintrusive flood control and flood repair activities	Unknown			County governments, U.S. Federal Energy Regulatory Commission, U.S. Army Corps of Engineers, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.6	Reduce impacts of development in streams, floodplains, and lake shores	Unknown			County governments, Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	Includes land purchase where appropriate

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Bull Trout (Salvelinus confluentus)	2	B1.3.7	Reduce transportation corridor impacts on streams	Unknown			County governments, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Transportation, Quinault Indian Nation, Olympic National Park, U.S. Forest Service, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by ongoing actions
Bull Trout (Salvelinus confluentus)	3	B1.3.8	Improve grazing practices	Unknown			U.S. Fish and Wildlife Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.3.9	Restore natural stream channel morphology	Unknown			Dungeness River Agricultural Water Users Association, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B1.4.1	Reduce reservoir operational impacts	Unknown			Tacoma Power, U.S. Federal Energy Regulatory Commission, Olympic National Park	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by 1.2.4
Bull Trout (Salvelinus confluentus)	2	B1.4.2	Provide instream flow downstream from dams	Unknown			Tacoma Power, U.S. Federal Energy Regulatory Commission, Olympic National Park	Work type not yet selected	Labor type not yet selected	Costs will be partially covered by 1.2.4
Bull Trout (Salvelinus confluentus)	3	B1.5.1	Update the 1995 Olympic National Forest and State watershed analyses	Unknown			U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B1.5.2	Upgrade or decommission problem roads associated with legacy timber harvest in the upland	Unknown			Washington Department of Natural Resources, Quinault Indian Nation, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B1.6.1	Implement projects that are key to restoring nearshore habitats	Unknown			County governments, Quinalt Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service, U.S. Army Corps of Engineers	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B2.1.1	Review effectiveness of current fish stocking policies	Unknown			Washington Department of Fish and Wildlife	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B2.2.1	Review existing policies, including enforcement policies, for preventing illegal transport and introduction of nonnative fishes	Unknown			Washington Department of Fish and Wildlife	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B2.3.1	Discourage unauthorized fish introductions	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B2.3.2	Develop public information program about bull trout	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B2.4.1	Review existing protocols for eradicating, suppressing, or managing nonnative fish populations and implement protocols where needed	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B2.5.1	Determine distribution and abundance of nonnative fish (i.e., brook trout) and identify overlap with bull trout	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Includes comprehensive surveys of lakes draining into bull trout streams
Bull Trout (Salvelinus confluentus)	2	B2.5.2	Identify brook trout and other nonnative fish populations impacting bull trout and evaluate feasibility of their removal	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Action follows completion of previous actions
Bull Trout (Salvelinus confluentus)	2	B2.5.3	Remove established brook trout populations impacting brook trout	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost depends on actions 2.5.2, 2.5.3
Bull Trout (Salvelinus confluentus)	2	B3.1.1	Integrate research and monitoring results into fish management plans	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B3.1.2	Protect remaining bull trout strongholds and native species complexes	Unknown			Washington Department of Fish and Wildlife, U.S. Federal Energy Regulatory Commission, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B3.1.3	Provide increased forage opportunities in freshwater	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. National Marine Fisheries Service (NOAA Fisheries)	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B3.1.4	Increase biomass of marine forage base	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. National Marine Fisheries Service (NOAA Fisheries)	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B3.2.1	Develop reporting requirements for recreational, commercial, and Tribal fisheries to evaluate bull trout incidental mortality and catch during fisheries for other salmonid species	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	1	B3.2.2	Evaluate and minimize incidental mortality of bull trout from recreational, gill-net, and other fisheries	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B3.2.3	Increase enforcement of angling regulations and target bull trout spawning and staging areas for extra enforcement efforts	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	At least one additional law enforcement officer
Bull Trout (Salvelinus confluentus)	3	B3.2.4	Implement angler education programs	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B3.2.5	Solicit information from commercial fishing guides	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B3.3.1	Monitor and evaluate effects on bull trout of salmon and trout hatchery production, stocking and associated fisheries	Unknown			Washington Department of Fish and Wildlife, U.S. Federal Energy Regulatory Commission, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	1	B3.3.2	Evaluate current and proposed fish stocking and reintroduction plans for Lake Cushman	Unknown			Washington Department of Fish and Wildlife, Tacoma Power, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B3.4.1	Monitor and evaluate effects on bull trout, salmon, and trout sport fisheries in Lake Cushman and Lake Kokanee	Unknown			Washington Department of Fish and Wildlife, Tacoma Power, U.S. Federal Energy Regulatory Commission, Olympic National Park	Work type not yet selected	Labor type not yet selected	Some costs may be covered under Action 3.3.1
Bull Trout (Salvelinus confluentus)	2	B3.4.2	Identify important bull trout spawning and staging areas that may require special regulations	Unknown			Washington Department of Fish and Wildlife, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Total cost will depend on 5.5.1, 5.5.2

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	2	B4.1.1	Develop and implement a genetic study plan for future collection and analysis of bull trout local populations	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B4.1.2	Determine level of interaction between bull trout and Dolly Varden populations	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	Costs will be shared with Puget Sound bull trout management unit
Bull Trout (Salvelinus confluentus)	3	B4.2.1	Evaluate level of gene flow among core areas	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B4.2.2	Prevent establishment of barriers	Unknown			County governments, Washington Department of Natural Resources, Washington Department of Transportation, U.S. Forest Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B4.3.1	If needed establish genetic reserve protocols and standards for initiating, conducting, and evaluating captive propagation programs supported by the recovery plan	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	This action is dependent on results of 5.2.4 and priority becomes 1 if reintroduction is feasible and necessary
Bull Trout (Salvelinus confluentus)	2	B4.3.2	Establish protocols, standards, and guidelines for implementing and monitoring bull trout transplantation or stocking if necessary	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	This action is dependent on results of 5.2.4, and becomes priority 1 if reintroduction is necessary

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Bull Trout (Salvelinus confluentus)	2	B5.1.1	Design and implement a population monitoring strategy for the Olympic Peninsula Management Unit	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B5.1.2	Implement a program to monitor and assess biological responses and changes in habitat from recovery actions	Unknown			U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B5.2.1	Investigate bull trout temporal and spatial movement to describe the distribution of juvenile, subadult, and adult bull trout in freshwater, estuarine, and nearshore habitats	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Ongoing. Some funding may be covered by other programs and Action 5.5.1
Bull Trout (Salvelinus confluentus)	1	B5.2.2	Conduct research to determine cause and severity of low population numbers in Skokomish core area	Unknown			Washington Department of Fish and Wildlife, Tacoma Power, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B5.2.3	Assess capacity of habitat in the Satsop River and the potential for bull trout reestablishing a self-sustaining population	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

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Bull Trout (Salvelinus confluentus)	2	B5.2.4	Collect, compile and analyze temperature data to determine bull trout distribution limits	Unknown			Washington Department of Ecology, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Some costs may be covered under Action 1.1.8
Bull Trout (Salvelinus confluentus)	2	B5.2.5	Identify and assess complete estuarine and marine forage base for bull trout	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Geological Survey	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B5.2.6	Conduct migrational studies for the Olympic Peninsula Management Unit and coordinate with the Puget Sound Management Unit and British Columbia	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Geological Survey	Work type not yet selected	Labor type not yet selected	Costs will be shared with Puget Sound Management Unit
Bull Trout (Salvelinus confluentus)	2	B5.3.1	Develop and implement a sediment monitoring program	Unknown			Washington Department of Natural Resources, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B5.3.2	Develop and implement a temperature monitoring program	Unknown			Washington Department of Natural Resources, Washington Department of Ecology, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Environmental Protection Agency, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B5.3.3	Evaluate the adequacy and effectiveness of best management practices	Unknown			Washington Department of Ecology, U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	Ongoing. Some funding may be covered by other programs

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	3	B5.4.1	Confirm presence and potential extent of black spot disease in the Hoh River	Unknown			U.S. Fish and Wildlife Service, Olympic National Park	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B5.5.1	Develop a predictive model of suitable habitat used to detect juvenile and resident bull trout	Unknown			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Some costs are covered by 5.5.1 and costs will be shared with the Puget Sound Management Unit
Bull Trout (Salvelinus confluentus)	1	B5.5.2	Continue and expand studies on bull trout distribution, abundance, life histories and factors affecting these characteristics	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Includes establishing index sites for surveying bull trout abundance
Bull Trout (Salvelinus confluentus)	1	B5.5.3	Locate additional spawning and early rearing sites	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Where appropriate use radio telemetry to track movements
Bull Trout (Salvelinus confluentus)	3	B5.6.1	Determine the life history requirements and interactions of potentially overlapping resident and migratory bull trout populations	Unknown			Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	3	B6.1.1	Coordinate bull trout recovery with other listed salmonid species recovery efforts	Unknown			Washington Department of Fish and Wildlife, Shared Strategy for Puget Sound Watershed Groups, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	1	B6.1.2	Ensure protection of the highest quality spawning and rearing habitats remaining within each core area through measures including conservation land purchases and easements	Unknown			Washington Department of Fish and Wildlife, Washington Department of Natural Resources, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	3	B6.1.3	Develop collaborative approaches with landowners	Unknown			U.S. Fish and Wildlife Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	Costs depend on number of plans and projects
Bull Trout (Salvelinus confluentus)	1	B6.2.1	Ensure adequate protection for bull trout at all life stages under Washington State Water Quality Standards	Unknown			County governments, Washington Department of Ecology, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Environmental Protection Agency, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	2	B6.2.2	Fully implement the Clean Water Act	Unknown			County governments, Washington Department of Ecology, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Federal Energy Regulatory Commission, Olympic National Park, U.S. Environmental Protection Agency, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B6.3.1	Support continued enforcement of Washington Forest Practices Rules, Washington Department of Natural Resources Habitat Conservation Plan, Tribal Forest Practice rules Shoreline Management Act, Growth Management Act, and Northwest Forest Plan	Unknown			Washington Department of Natural Resources, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B7.1.1	Generate progress reports on implementation of the bull trout recovery plan for the Olympic Peninsula Management Unit	Unknown			Washington Department of Fish and Wildlife, Quinault Indian Nation, Skokomish Tribe, Jamestown S'Klallam Tribe, Lower Elwha S'Klallam Tribe, U.S. Fish and Wildlife Service, Olympic National Park, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Bull Trout (Salvelinus confluentus)	2	B7.2.1	Develop and implement a standardized monitoring program to evaluate the effectiveness of recovery efforts	Unknown			U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Bull Trout (Salvelinus confluentus)	3	B7.3.1	Periodically assess progress toward recovery goals and assess recovery action priorities	Unknown			Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Washington Department of Ecology, U.S. Fish and Wildlife Service, U.S. Forest Service, Natural Resources Conservation Service	Work type not yet selected	Labor type not yet selected	